

Gulf of Mexico Harmful Algal Bloom Bulletin

13 January 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: January 10, 2005

Conditions:

A harmful algal bloom has been identified offshore southwest of Clearwater and west of Bradenton. Impacts at the beach are expected to be low through Monday. Reports of discolored water are possible.

A harmful algal bloom has been identified north of the lower Keys. Impacts at the beach are expected to be low through Monday. Reports of discolored water are possible.

Analysis:

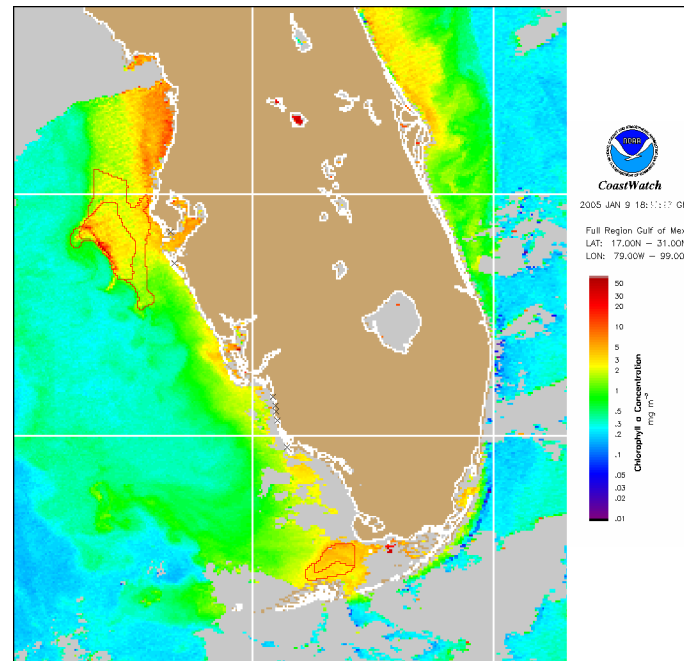
A harmful algal bloom has been identified offshore, west of the Tampa Bay area. Offshore samples from January 7 have confirmed the presence of *Karenia brevis*. Coastal samples in the Tampa area from January 10 had no *Karenia brevis* except from one sample with normal concentration. The most recent imagery has been obscured by clouds in this area. Extent of this bloom can be seen in imagery from January 9: east edge at 27°3'N, 82°55'W; west tip at 27°36'N, 83°26'W; north edge at 28°10'N, 83°11'W; south tip at 27°3'N, 82°55'W. The east edge of the bloom is about 15 miles (24 km) northwest of Bradenton Beach. Sampling offshore of Clearwater is recommended. Onshore winds are forecasted for tomorrow, which could transport the bloom towards the shore. Little movement of the bloom as a whole is expected through Monday, although there may be some increase in its western extent.

A harmful algal bloom persists just north of the Lower Keys. Based on imagery from January 11, the northeastern edge is at 25°13'N, 81°14'W, 13 miles (21 km) southwest of Cape Sable. Weak transport of the bloom towards the west is expected through Monday.

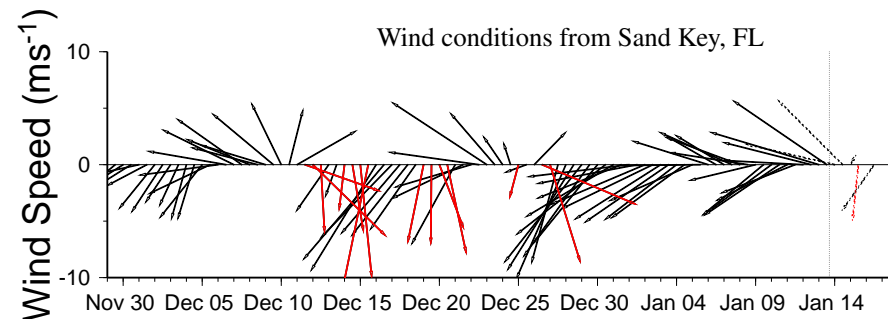
Bronder, Fenstermacher

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. These data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Distribution for military, or commercial purposes is NOT permitted.
3. There are restrictions on Internet/Web/public posting of these data.
4. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

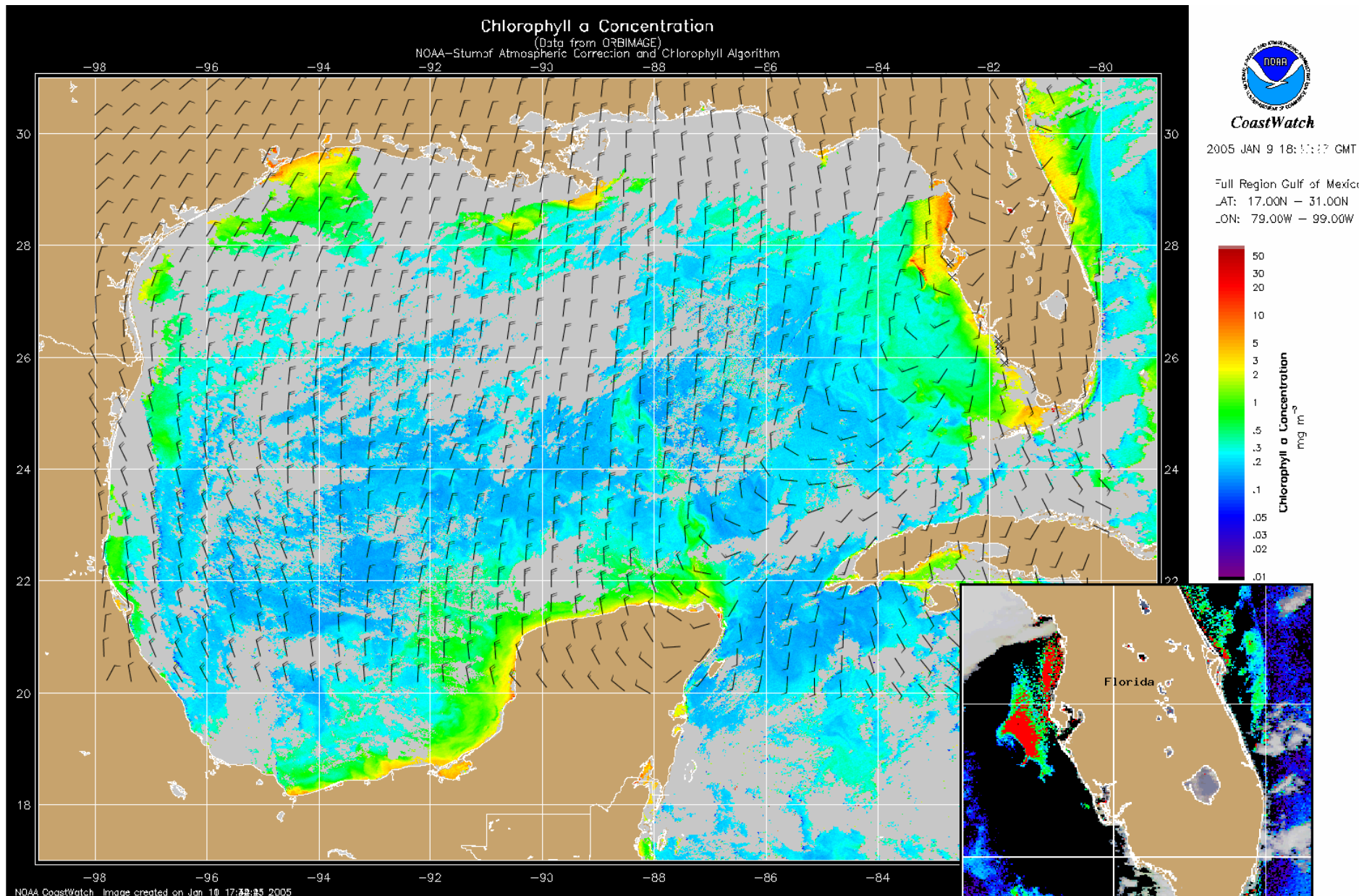


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 6, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

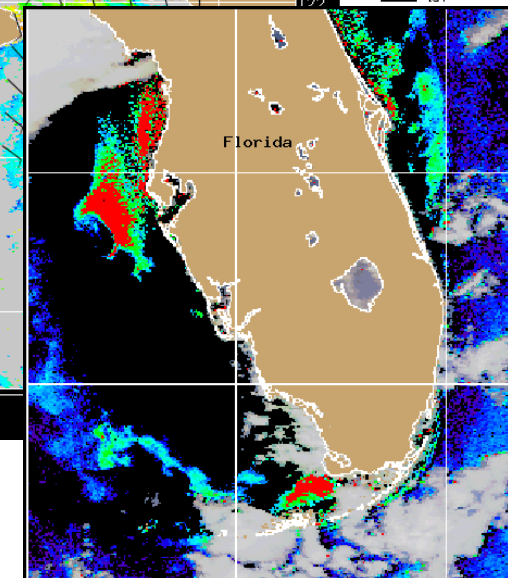


Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Keys: Winds have been from the southeast for the past couple of days, and were northeasterly for a couple of days before that. The forecast calls for southeast winds (20 knots, 10 m/s) today, southeast to south (15 knots, 7 m/s) tomorrow, variable (10 knots, 5 m/s) tomorrow night, northeast/east (7 m/s) Saturday, north/northeast (7 m/s) Sunday, and northeast (10 m/s). Tampa: Winds have been from the southeast for the past couple of days, and were northerly for a couple of days before that. The forecast calls for southeast winds (10 m/s) today, southwest (10 m/s) tomorrow, north (10 m/s) tomorrow night, and northeast (10 m/s) Saturday through Monday.

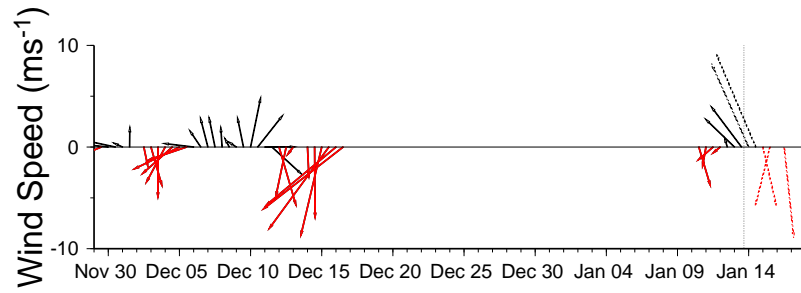


Chlorophyll concentration from satellite and forecast winds for January 14, 2005 18Z with cell concentration sampling data from January 6, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Blooms shown in red (see p. 1 analysis and image for interpretation)

Wind conditions from Egmont Key, FL



Wind conditions from Venice Pier, FL

